

Please replace page 9, lines 3-15, with the following:

B2
Referring now to Figure 3, there is shown a cross sectional view of the glass based sensor die 121 of the present invention. While the sensor of the present invention is generally referred to as a glass based sensor, it is understood that other materials having appropriate physical characteristics could also be used. For example, alumina could be used as the base material for forming the sensor die 121. These other materials are intended to be within the scope and spirit of the present invention. A glass body 110 is used as the basis for forming sensor die 121. Upon the upper surface of glass body 110 is a layer of silicon nitride (Si_xN_y) 112 which again serves passivation and structural functions. Upon this passivation layer 112 there is constructed the heater element 114 and sensors 116, similar to those described above and well known by those skilled in the art. Once again, these heating and sensing elements can be fabricated from many materials, such as platinum. Covering the entire upper surface of the structure is a top layer 118 which serves as a protective passivation coating. Top layer 118 again is typically silicon nitride (Si_xN_y).

IN THE CLAIMS

Please amend claims 1, 4, 5, and 12 as follows:

A physical property sensor die, comprising:

- B3
a substantially solid insulating sensor body having a front surface and a back surface, wherein the sensor body has a plurality of openings extending from the front surface to the back surface;
- a plurality of sensing elements coupled to the front surface for monitoring the properties of a fluid, the plurality of sensing elements including at least one thermal sensor and at least one heater; and
- a connection material filling the plurality of openings such that the plurality of sensing elements are electrically connected to corresponding connection material on the back surface, and the connection material is configured to accommodate connection of the connection material to an electronics substrate.

- B4
4. The physical property sensor die of claim 1 wherein the plurality of sensing elements include an environmental sensor.

B4
cont

5. The physical property sensor die of claim 1 wherein the plurality of sensing elements include at least a second thermal sensor.

B5

12. The physical property sensor die of claim 6 wherein the photosensitive glass is FOTURAN.

Please cancel claims 2 and 3.

Please add claims 33 and 34:

B6

33. The physical property sensor of claim 1 wherein the sensor body has a low thermal conductivity.
34. The physical property sensor of claim 1 wherein the sensor body is made up of PYREX.